

Claims:

1 – 10. (Canceled)

11. (Previously presented) A composition to be used for the manufacture of transparent, gel-free films, comprising:

a) at least 65 wt% of a styrenic block copolymer, having a molecular structure according to the formula

$S-(I/B)-S$ (1) or $[S-(I/B)]_nX$ (2),

wherein each S independently is a polymer block of predominantly styrene and (I/B) is a substantially random polymer block of predominantly isoprene and butadiene in a mutual weight ratio in the range of from 30/70 to 70/30,

wherein said polymer block (I/B) has a glass transition temperature (T_g) of at most -60°C (determined according to ASTM E-1356-98),

wherein n is an integer equal to or greater than 2, and

wherein X is the residue of a coupling agent,

wherein said styrenic block copolymer having a poly(styrene) content in the range of from 28 to 31 % by weight, having poly(styrene) blocks S of a true molecular weight in the range of from 10,000 to 15,000, having an apparent molecular weight of the complete block copolymer in the range of from 110,000 to 160,000 and wherein the diblock S-(I/B) optionally occurs in a content of at most 20 mol%,

b) from 5 to 25 wt% of a second thermoplastic resin selected from poly(styrene), polyethylene, polypropylene or copolymers of ethylene and propylene,

c) from 0 to 10 wt% of a plasticizing oil,

the sum of the percentages of the components a, b and c being 100%, and all weight percentages being relative to the weight of the complete composition.

12. (Previously presented) The composition of claim 11, wherein the component (a) occurs in a weight proportion of from 70 to 90 wt%.

13. (Previously presented) The composition of claim 11, wherein polymer block (I/B) has average homopolymer block length PB, respectively PI of less than 100 monomer units.

14. (Previously presented) The composition of claim 12 wherein polymer block (I/B) has average homopolymer block length PB, respectively PI of less than 50 monomer units.

15. (Previously presented) The composition of claim 13, wherein the mutual weight ratio between isoprene and butadiene is in the range of from 48/52 to 52/48.

16. (Previously presented) The composition of claim 11, wherein component (b) occurs in a weight proportion of from 8 to 12 wt%.

17. (Cancelled)

18. (Previously presented) The composition of claim 11, wherein the component

(c) occurs in a weight proportion of from 1 to 10 wt%.

19. (Previously presented) The composition of claim 11, wherein the component (c) occurs in a weight proportion of from 4 to 6 wt%.

20. (Previously presented) The composition of claim 11, wherein the component (a) comprises poly(styrene) blocks S, having a true molecular weight in the range of from 10,500 to 15,000, and said block copolymer has an apparent molecular weight of from 115,000 to 155,000, and has a poly(styrene) content of from 29 to 30 %, and has a diblock S-(I/B) content of from 0 to 15 mole%.

21. (Previously Presented) The composition of claim 11, wherein

- i. said component (a) comprises poly(styrene) blocks S, having a true molecular weight in the range of from 10,500 to 15,000,
- ii. said block copolymer has an apparent molecular weight of from 115,000 to 155,000, a poly(styrene) content of from 29 to 30 %, and a diblock S-(I/B) content of from 0 to 15 mole%,
- iii. said component (a) occurs in a weight proportion of from 70 to 90 wt%, said component (b) occurs in a weight proportion of from 8 to 12 wt%, and said component (c) occurs in a weight proportion of from 4 to 6 wt% and
- iv. said polymer block (I/B) has an average homopolymer block length PB, respectively PI of less than 100 monomer units.

22. (Withdrawn) An extruded mono- or multi-layer film comprising:

a) at least 65 wt% of a styrenic block copolymer, having a molecular structure according to the formula

$S-(I/B)-S$ (1) or $[S-(I/B)]_nX$ (2),

wherein each S independently is a polymer block of predominantly styrene and (I/B) is a substantially random polymer block of predominantly isoprene and butadiene in a mutual weight ratio in the range of from 30/70 to 70/30, wherein said polymer block (I/B) has a glass transition temperature (T_g) of at most -60°C (determined according to ASTM E-1356-98),

wherein n is an integer equal to or greater than 2, and

wherein X is the residue of a coupling agent,

wherein said styrenic block copolymer having a poly(styrene) content in the range of from 28 to 31 % by weight, having poly(styrene) blocks S of a true molecular weight in the range of from 10,000 to 15,000, having an apparent molecular weight of the complete block copolymer in the range of from 110,000 to 160,000 and wherein the diblock S-(I/B) optionally occurs in a content of at most 20 mol%,

b) from 5 to 25 wt% of a second thermoplastic resin,

c) from 0 to 10 wt% of a plasticizing oil,

the sum of the percentages of the components a, b and c being 100%, and all weight percentages being relative to the weight of the complete composition.

23. (Withdrawn) The film of claim 22, wherein the component (a) occurs in a weight proportion of from 70 to 90 wt%, component (b) occurs in a weight proportion of from 8 to 12 wt%, and component (c) occurs in a weight proportion of from 4 to 6 wt%.

24. (Withdrawn) The film of claim 22, wherein polymer block (I/B) has average homopolymer block length PB, respectively PI of less than 100 monomer units.

25. (Withdrawn) The film of claim 22, wherein component (b) is selected from poly(styrene), polyethylene, polypropylene or copolymers of ethylene and propylene.

26. (Withdrawn) The film of claim 22, wherein the component (a) comprises poly(styrene) blocks S, having a true molecular weight in the range of from 10,500 to 15,000, and said block copolymer has an apparent molecular weight of from 115,000 to 155,000, and has a poly(styrene) content of from 29 to 30 %, and has a diblock S-(I/B) content of from 0 to 15 mole%.

27. (Withdrawn) A cast or blown mono- or multi-layer film for personal hygiene applications, comprising:

a) at least 65 wt% of a styrenic block copolymer, having a molecular structure according to the formula

S-(I/B)-S (1) or [S-(I/B)]_nX (2),

wherein each S independently is a polymer block of predominantly styrene and (I/B) is a substantially random polymer block of predominantly isoprene and butadiene in a mutual weight ratio in the range of from 30/70 to 70/30,

wherein said polymer block (I/B) has a glass transition temperature (T_g) of at most -60°C (determined according to ASTM E-1356-98),

wherein n is an integer equal to or greater than 2, and

wherein X is the residue of a coupling agent,

wherein said styrenic block copolymer having a poly(styrene) content in the range of from 28 to 31 % by weight, having poly(styrene) blocks S of a true molecular weight in the range of from 10,000 to 15,000, having an apparent molecular weight of the complete block copolymer in the range of from 110,000 to 160,000 and wherein the diblock S-(I/B) optionally occurs in a content of at most 20 mol%,

b) from 5 to 25 wt% of a second thermoplastic resin,

c) from 0 to 10 wt% of a plasticizing oil,

the sum of the percentages of the components a, b and c being 100%, and all weight percentages being relative to the weight of the complete composition.

28. (Withdrawn) The film of claim 27, wherein the component (a) occurs in a weight proportion of from 70 to 90 wt%, component (b) occurs in a weight proportion of from 8 to 12 wt%, and component (c) occurs in a weight proportion of from 4 to 6 wt%.

29. (Withdrawn) The film of claim 27, wherein polymer block (I/B) has average homopolymer block length PB, respectively PI of less than 100 monomer units.

30. (Withdrawn) The composition of claim 29, wherein component (b) is selected from poly(styrene), polyethylene, polypropylene or copolymers of ethylene and propylene.

31. (Withdrawn) The film of claim 30, wherein the component (a) comprises poly(styrene) blocks S, having a true molecular weight in the range of from 10,500 to 15,000, and said block copolymer has an apparent molecular weight of from 115,000 to 155,000, and has a poly(styrene) content of from 29 to 30 %, and has a diblock S-(I/B) content of from 0 to 15 mole%.

32. (Withdrawn) The extruded mono- or multi-layer film of claim 22, wherein the component (c) occurs in a weight proportion of from 1 to 10 wt%.

33. (Withdrawn) The A cast or blown mono- or multi-layer film of claim 27, wherein the component (c) occurs in a weight proportion of from 1 to 10 wt%.

34. (New) A composition to be used for the manufacture of transparent, gel-free films, comprising:

a) at least 65 wt% of a styrenic block copolymer, having a molecular structure according to the formula $[S-(I/B)]_nX$,

wherein each S independently is a polymer block of predominantly styrene and (I/B) is a substantially random polymer block of predominantly isoprene and butadiene in a mutual weight ratio in the range of from 30/70 to 70/30,

wherein said polymer block (I/B) has a glass transition temperature (T_g) of at most -60°C (determined according to ASTM E-1356-98),

wherein n is an integer equal to or greater than 2, and

wherein X is the residue of a coupling agent,

wherein said styrenic block copolymer having a poly(styrene) content in the range of from 28 to 31 % by weight, having poly(styrene) blocks S of a true molecular weight in the range of from 10,000 to 15,000, having an apparent molecular weight of the complete block copolymer in the range of from 110,000 to 160,000 and wherein the diblock S -(I/B) optionally occurs in a content of at most 20 mol%,

b) from 5 to 25 wt% of a second thermoplastic resin selected from poly(styrene), polyethylene, polypropylene or copolymers of ethylene and propylene,

c) from 0 to 10 wt% of a plasticizing oil,

the sum of the percentages of the components a, b and c being 100%, and all weight percentages being relative to the weight of the complete composition.